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EXAMINER	
HAMILTON, CYNTHIA	

ART UNIT	PAPER NUMBER
1752	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/530,632	ICHIKAWA ET AL.	
	Examiner	Art Unit	
	Cynthia Hamilton	1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 4/7/05.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-18 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-18 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4/7/05.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The abstract of the disclosure is objected to because (1) more than one paragraph is present and (2) the abstract is over 150 words long. Correction is required. See MPEP § 608.01(b) and 37 CFR 1.72(b).

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The information disclosure statement filed April 7, 2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document. Applicants were were not informed in Notice of DO/EO Acceptance mailed September 22, 2005 that the copies of references cited in ISR were present. Thus, all but US patent documents cited in applicant's statement have been crossed out because no copy was of record. The examiner has made of record all prior art from the search report that she used in the rejections below. This was done to make sure copies of references were scanned into the IFW files for future reference. 37 CFR 1.98(a)(2) requires a legible copy of: (1) each foreign patent; (2) each publication or that portion which caused it to be listed; (3) for each cited pending U.S. application, the application specification including claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion, unless the

cited pending U.S. application is stored in the Image File Wrapper (IFW) system; and (4) all other information, or that portion which caused it to be listed. In addition, each IDS must include a list of all patents, publications, applications, or other information submitted for consideration by the Office (see 37 CFR 1.98(a)(1) and (b)), and MPEP § 609.04(a), subsection I. states, "the list ... must be submitted on a separate paper." Applicant is advised that the date of submission of any item of information or any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the IDS, including all "statement" requirements of 37 CFR 1.97(e). See MPEP § 609.05(a). See particularly MPEP 1893.03 (g).

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 2-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 is as follows:

> **2. (Original) The photosensitive resin printing plate precursor according to Claim 1, wherein the water-insoluble heat-sensitive mask layer (C) is crosslinked with a curable resin.**

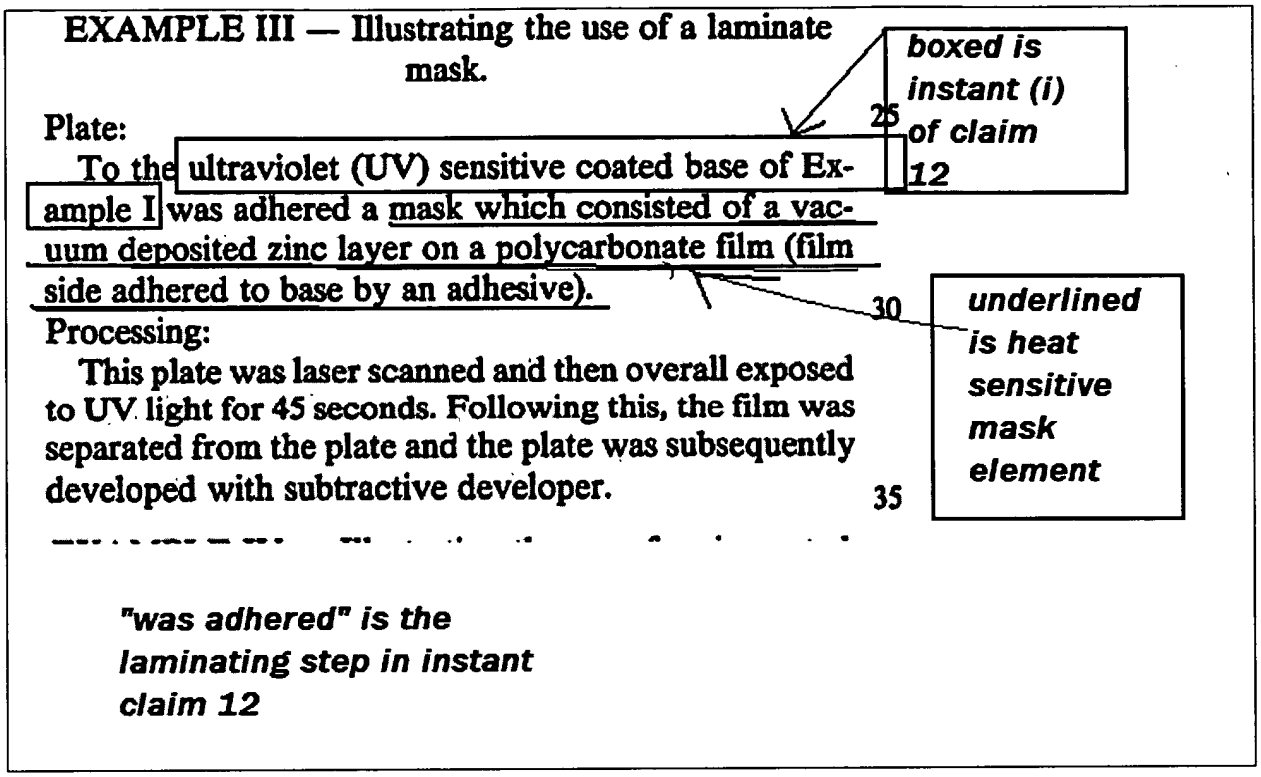
In reading this claims a worker of ordinary skill in the art would be unsure if applicants intended to claim the precursor or a method of modifying the precursor by crosslinking the layer (C) or was claiming the layer (C) as a product by process with the process of making the layer (C) having occurred with crosslinking of a curable resin at some point before the "plate precursor" of claim 2 is claimed by applicants or applicants in claim 2 is claiming a precursor with a layer (C)

which has the ability to be crosslinked with a curable resin. The language of "is" being present tense leaves in question what applicants intended to claim. Thus, the precursors of claims 2 and 3 are held too confusing for workers of ordinary skill in the art to determine the limits of the claimed invention.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

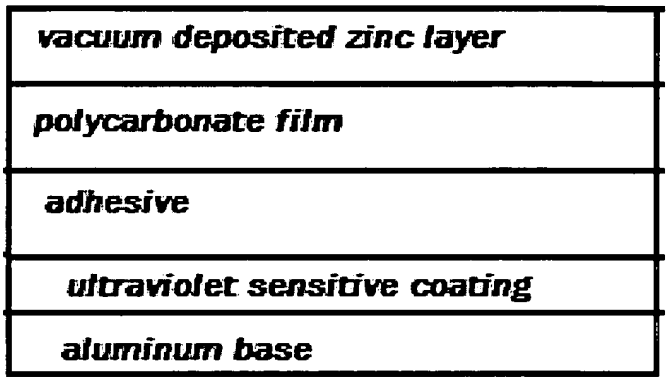
7. Claims 12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Peterson (4,132,168). With respect to instant claim 12, the Example III of Peterson anticipates the instant processes. An annotated version of Example III of Peterson showing relevant portions is set forth as follows:



The examiner notes that instant claims 12-16 make no requirement with respect to the nature of the photosensitive resin layer other than it be photosensitive resin layer. The photosensitive layer used by Peterson is found in col. 2 and is as follows:

> In the following examples a negative working diazo composition, the reaction product of p-diazodiphenylamine-formaldehyde condensation product and sodium lauryl sulfate was employed. The laser employed was a YAG(yttrium aluminum garnet) laser.

Thus, the layer is a resin as it is a condensation product and is referenced in Example 1 as "photopolymerized" by "UV". The examiner notes that the formed element of Peterson in Example III is as follows:



Thus, in Element III if the polycarbonate film is taken as a protective layer then the water insoluble layer of vacuum deposited zinc is not laminated in contact with the ultraviolet sensitive coating by Peterson as required in instant claim 13. However, with respect to instant claim 15 there is an adhesive layer between the polycarbonate film and the ultraviolet sensitive coated base thus the process set forth by Peterson anticipates the instant process of claim 15 as well.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1, 4-5, 7-8, 10, 12 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson (4,132,168) in view of Dietrich (3,615,630) or Bauer et al (3,751,259) as further evidenced by Taggi et al (Kirk-Othmer Encyclopedia of Chemical Technology). Peterson teaches in col. 2:

"... a presensitized planographic printing plate, having a layer of material which is sensitive to ultraviolet light, is provided with a coating which is opaque to ultraviolet light

and is capable of being removed or rendered transparent to ultraviolet light by non-actinic laser radiation. A mask or template is formed on the presensitized plate by selectively removing the layer which is opaque to ultraviolet light by means of an appropriate laser beam. The beam of radiant energy is applied to the opaque layer to vaporize and remove it in selected areas so that the remaining areas of the opaque layer define the areas which are to be exposed to ultraviolet."

And

"The presensitized printing plate underlying the mask layer can be any one of the commercially available types of either positive working or negative working lithographic printing plates or it can be a dry planographic printing plate such as disclosed in U.S. Pat. No. 3,606,922, Doggett, granted Sept. 21, 1971. The construction or composition of the presensitized printing plate portion of the plate of the present invention is not critical for the reason that once the mask is formed in situ and the plate is exposed to ultraviolet light, development of the plate proceeds in a conventional manner."

Thus, the use of any of the known lithographic negative working plates known in the art at the time of Peterson would have been prima facie obvious to use with the insitu formed mask to obtain the two listed advantages of using a laser for image formation put forth by Peterson in col. 1 which are as follows:

" The first is that it permits the elimination of the master transparency. The images can be either computer generated or can be provided by scanning a paste-up or other original by appropriate photoelectronic means which in turn modulates the laser beam. The second advantage is that the signal, however generated, for modulating the laser

which writes the image on the plate can be transmitted over great distances to a multiplicity of writing lasers. This obviously would be of particular significance to newspaper and magazine publishers who operate a number of regional printing facilities."

The insitu masks of Peterson are set forth in col. 2 and the examples and are described as follows:

"The layer of material which is opaque to ultraviolet light and capable of being removed or rendered transparent to ultraviolet light by non-actinic laser radiation can be a metal layer or a dispersion of metal or carbon particles in an organic binder. Suitable metals include aluminum, copper and zinc. The metal film must be thick enough to be opaque to ultraviolet and it will normally be made as thin as practical in order for it to be vaporized and removed rapidly with a minimum amount of radiant energy applied by the laser for this purpose. By way of example, a zinc film on the order of one micro-inch in thickness satisfies the criteria. A suitable method for forming films of metal at such thickness is vacuum deposition. The layer of metal can be applied directly to the photosensitive surface of the presensitized printing plate but may also advantageously be applied to a thin film of a plastic such as a polyester which is then applied to the presensitized printing plate surface."

Peterson does not explicitly disclose any monomer and resin combination of photosensitive layers in their systems.

With respect to instant claims 1, 4-5, 7-8, 10, 12 and 17-18, the use of the known photopolymerizable plates of either Dietrich or Bauer et al integral with the *in situ* masks of

Peterson would have been prima facie obvious to take advantage of the computerized imaging transmissible over great distances as well as the removal of the need for an expensive master transparency. With respect to Dietrich, the patent was issued in 1971 and disclosed for use in the production of planographic printing plate foils, in col. 5, lines 47-57. Planographic plates are lithographic plates as well. Examples 8-13 of Dietrich set forth plates comprised water soluble or dispersible resins and monomers inclusive of polyamide in Example 13. Offset printing plates in Example 8 in Dietrich disclose a developer comprised of a majority of water with a photopolymerizable composition comprised of two resins inclusive of polyvinyl butyral which is a derivative of polyvinyl alcohol as well as maleic acid/styrene copolymer and triethylenediacrylate monomer. There is a thin top coating of polyvinyl alcohol also present on top of the solution as a protective layer. With respect to Bauer et al, the offset printing forms set forth are also lithographic printing plates. Bauer et al disclose in col. 4, lines 52-58, that binders, liquid and or solid polymerizable organic compounds and photoinitiators are essential in their copying compositions. The binders are all resins and the polymerizable organic compounds are monomers as described in the paragraphs following the paragraph cited. The paragraph at the top of col. 5 of Bauer et al makes clear that water based dispersibility or solubility are contemplated . The paragraph is as follows:

> The photopolymerizable copying compositions may contain one or more binders, as usual, such as solvent-soluble polyamides, polyvinyl acetates, polymethyl-methacrylates, polyvinyl butyrals, unsaturated polyesters, alkali-soluble or alkali-swellable or -softenable styrene/maleic acid anhydride copolymers, maleic resins, terpene-phenol resins and the

like. Since aqueous-alkaline developers are frequently used for development, binders which are either alkali-soluble or which soften in aqueous alkalies are preferred. Examples of such binders are copolymers of styrene and maleic anhydride, or of methyl methacrylate and methacrylic acid, and maleic resins."

The plates of col. 6-7 Bauer et al are all made using the water dispersible resins. As to lithographic being planographic, Taggi et al disclose on page 1 as one of the four main printing processes "lithography or planography" and in the paragraph bridging pages 1-2 discloses how they work. In the second full paragraph on page 2, Taggi et al explains the use of "offset" with respect to lithography and the reference to "offset printing" when referring to lithography. Taggi et al is an article in Kirk-Othmer Encyclopedia of Chemical Technology dated 1996 which also discloses lithography with respect to image Duplication starting on page 27 at 7.1 wherein it is references as "a planographic process". On page 28, at 7.1.2 the "Radiation –Sensitive Coatings" are disclosed in the same way as that of Peterson, i.e. negative and positive working. The coating cited by Taggi et al that is most like that of Peterson is the first negative "diazo-based coating" set forth. The next negative coating composition is like that of Dietrich or Bauer et al. Thus, those of ordinary skill in the art would have understood the meaning of negative and positive when referenced as by Peterson et al and understood the use of planographic, offset and lithographic interchangeably in the patent literature to reference the same kind of photosensitive plates. Taggi et al is cited here as evidence of the terminology used by these references as being as stated by the examiner.

10. Claims 1, 4, 9-10, 12 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fan (WO 94/03838 A1). The element of Fan is described in the Summary of Invention as follows:

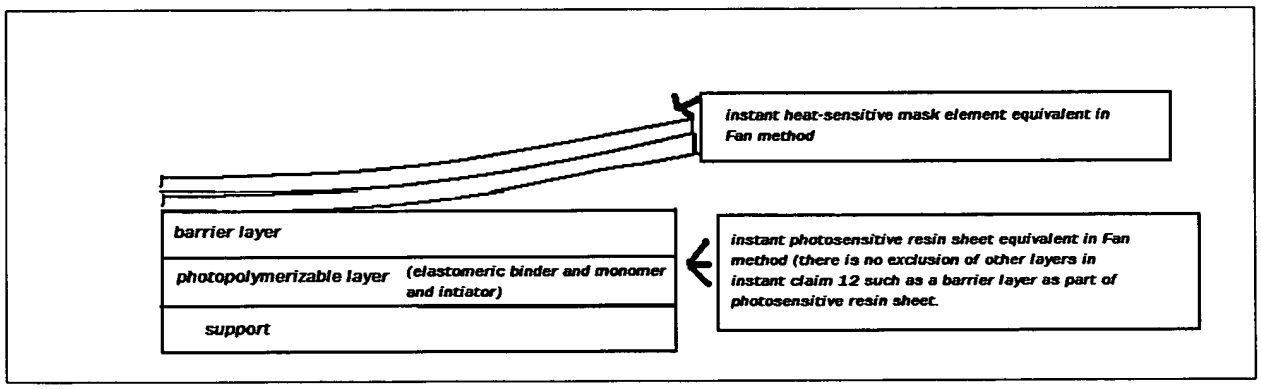
> SUMMARY OF THE INVENTION
>
> The present invention relates to a photosensitive printing element used for preparing flexographic printing plates comprising
>
> (a) a support,
>
> (b) a photopolymerizable layer comprising an elastomeric binder, at least one monomer and an initiator having sensitivity to non-infrared actinic radiation, said layer being soluble, swellable or dispersible in a developer solution prior to exposure to actinic radiation,
>
> (c) at least one barrier layer which is soluble, swellable, dispersible or liftable in the developer solution for the photopolymerizable layer prior to exposure to actinic radiation, and
>
> (d) at least one layer of infrared radiation sensitive material which is substantially opaque to actinic radiation wherein the infrared-sensitive material is ablatable from the surface of the barrier layer upon exposure to infrared laser radiation.

11. What is not present with respect to the instant invention of generic claim 1 is a requirement that the elastomeric binder be "a water-soluble or water-dispersible resin" and the monomer be "an ultraviolet-curable monomer" and that the infrared, i.e. heat sensitive, layer be "water-insoluble". All of the examples of Fan make use to non-aqueous developers for their

photosensitive layers. However, at page 5, lines 18-27, Fan discloses that the elastomeric binder can be soluble, swellable or dispersible in aqueous or semi-aqueous developers then gives a list of patents as description of such binders. On page 6 of Fan, at lines 19-33, the photoinitiator for the photopolymerizable layer is given as sensitive to "visible or ultraviolet radiation, preferably ultraviolet radiation." As to the nature of the infrared sensitive layer, Fan on page 12, describes the option binder used with the infrared sensitive material as removed by the heat generated by the infrared absorbing material or should be removable from the surface of the photopolymerizable layer. This condition is meat if the binder is soluble, swellable or dispersible in the developer solvent or removed in a separate step with a second solvent that does not affect the polymerized areas of the photopolymerizable layer. The binders are inclusive of homopolymers and copolymers of acrylates, methacrylates and styrene as well as butadiene, isoprene and their copolymers. Such would inherently be water insoluble. Fan, also on page 15, at lines 17-24, teach the use of vapor deposition for the infrared-sensitive layers and if so were done without the optional binder would lead to water insoluble layers as well. Thus, with respect to instant claims 1, 4, and 9-10 and 17, the elements and methods of Fan when making use of the elastomeric binders soluble, swellable or dispersible in aqueous or semi-aqueous developers and those photoinitiators which would polymerize the monomer in the ultraviolet range of the electromagnetic spectrum as preferred by Fan and making use of the vapor deposited infrared radiation sensitive material or said material with a water insoluble binder required to be removed with a separate solvent than that of the water containing developer. With respect to instant claim 12, the element of Fan is made in several ways with one being set forth on page 16 as follows:

> Alternatively, the three layers can all be prepared on temporary coversheets: the photopolymerizable layer by extrusion and calendering or pressing in a mold; the barrier and infrared-sensitive layers by coating. The final element is prepared by removing the temporary coversheet from the photopolymerizable element, applying the barrier layer such that the barrier layer is adjacent to the photopolymerizable layer, removing the temporary coversheet from the barrier layer, and applying the infrared-sensitive layer such that the infrared-sensitive layer is adjacent to the barrier layer. The composite structure is laminated together as each new layer is added or one time for all the layers. The temporary coversheet on the infrared-sensitive layer can remain in place for storage, but must be removed prior to imaging.

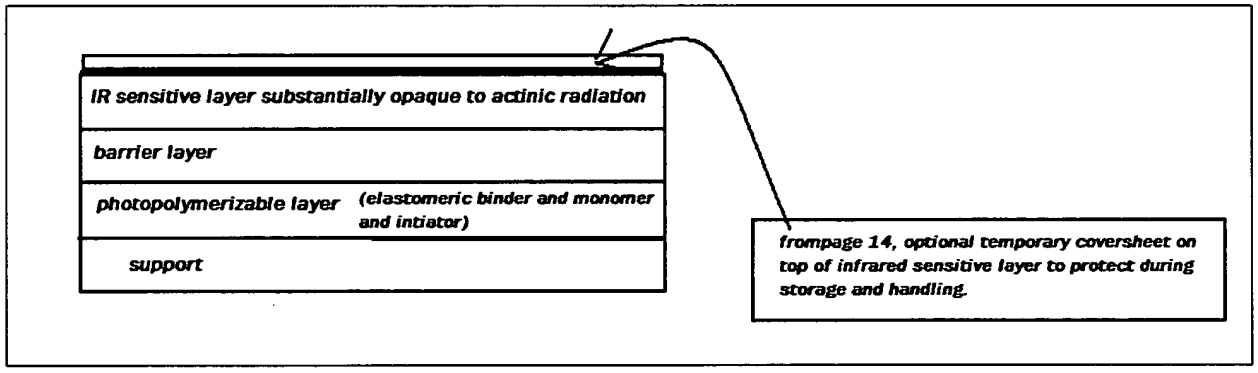
When the method of laminating the infrared sensitive layer on last over the barrier layer already present on the photopolymerizable layer occurs then this method is the same as found in instant claim 12 with the exception of stating the infrared-sensitive layer is water-insoluble. The method is described in the examiner-generated graphic below:



Since all of the examples given in Fan are drawn to organic solvent developable systems instead of water soluble systems the examples of laminates such as found in Example 7 which are to be

laminated in the method of lamination set forth, the methods of Fan anticipate that of instant claim 12. However, the elastomeric binder soluble, swellable or dispersible in aqueous or semi-aqueous developers when used in the photopolymerizable layer of Fan would be made obvious to be formed in the method of claim 12 in view of the teachings to do so and the only mask layers being given formed in such a manner being water insoluble.

With respect to instant claim 18, the element of Fan to be imaged is that below shown in an examiner generated graphic:

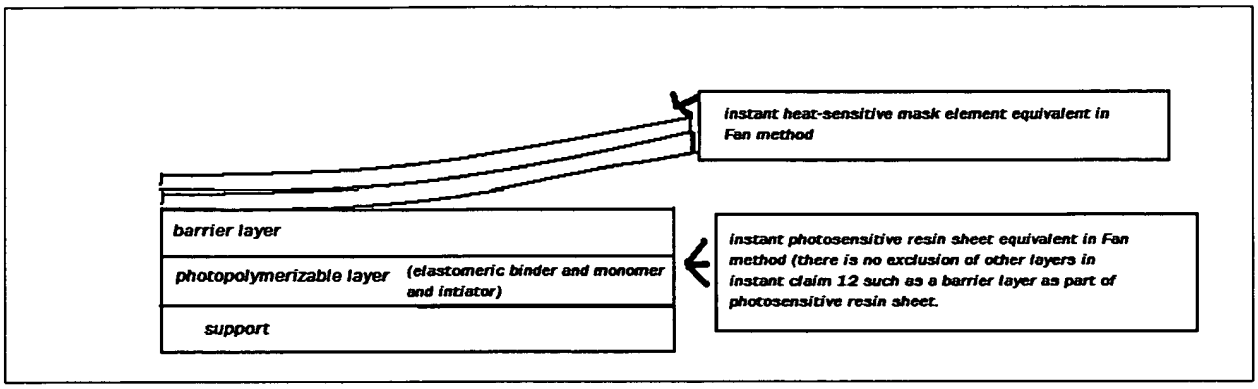


The optional temporary coversheet is removed prior to IR laser image as set forth in the paragraph bridging pages 5-16 of Fan. Thus, the method of imaging any of the elements of Fan whether designed for aqueous developers or not requires that the protective cover layer on the infrared mask layer be removed before forming of the insitu mask thus making prima facie obvious the methods of instant claim 18. The only example of this removal is found on page 27 in Example 6, wherein the "silicone-release Mylar coversheet" was peeled away as no solvent was disclosed and there was a silicone-release layer between infrared layer and the cover layer for just such peeling. Because of this disclosure in Fan, plates with such a peel assist layer such as those of instant claim 10 are also made prima facie obvious by Fan with any of his systems.

12. Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Fan (WO 94/03838 A1). With respect to instant claim 12, the element of Fan is made in several ways with one being set forth on page 16 as follows:

> Alternatively, the three layers can all be prepared on temporary coversheets: the photopolymerizable layer by extrusion and calendering or pressing in a mold; the barrier and infrared-sensitive layers by coating. The final element is prepared by removing the temporary coversheet from the photopolymerizable element, applying the barrier layer such that the barrier layer is adjacent to the photopolymerizable layer, removing the temporary coversheet from the barrier layer, and applying the infrared-sensitive layer such that the infrared-sensitive layer is adjacent to the barrier layer. The composite structure is laminated together as each new layer is added or one time for all the layers. The temporary coversheet on the infrared-sensitive layer can remain in place for storage, but must be removed prior to imaging.

When the method of laminating the infrared sensitive layer on last over the barrier layer already present on the photopolymerizable layer occurs then this method is the same as found in instant claim 12 with the exception of stating the infrared-sensitive layer is water-insoluble. The method is described in the examiner-generated graphic below:



Since all of the examples given in Fan are drawn to organic solvent developable systems instead of water soluble systems the examples of laminates such as found in Example 7 which are to be laminated in the method of lamination set forth, the methods of Fan anticipate that of instant claim 12.

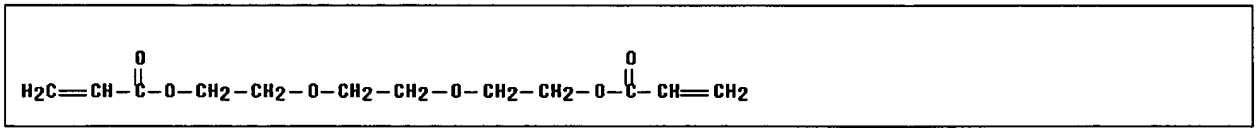
13. Claims 1, 8, 10, 12-14 and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Fan (EP 0 741 330 A1). With respect to instant claims 1, 8, 10, 12-14 and 17-18, Example 6 of Fan anticipates the instant invention. The photosensitive composition has PVP-VA which is poly(vinylpyrrolidone/vinyl acetate) which is water soluble or water dispersible because the photopolymer element is aqueous developable, the coversheet has a blend of HPC, i.e. hydroxypropyl cellulose, and HEC, i.e. hydroxyethyl cellulose, coated on it before coating on the infrared ablatable layer from Example 1 which is a water insoluble layer as indicated by solvent being n-butanol/toluene. The binder was polyamide with carbon black and is referenced in Example 6 as organo soluble infrared sensitive layer adhered to the aqueous photopolymer surface. With respect to instant claims 1, 8, 10, 12-14 and 17-18, Example 7 of Fan also anticipates the instant invention. The entirety of Fan is drawn to organic developable layers as well as water-soluble or dispersible layers thus only those examples reading on the instant claims

were selected as anticipatory. Fan on page 7 disclose that the selection of binder for the infrared sensitive layer is dependent upon incompatibility with the migratory materials in the photopolymerizable layer and is to be tailored specifically to each photopolymerizable layer used whether solvent based or aqueous based. Thus, all the binders listed on page 7 are not useful with all photopolymerizable layers. Thus, each must be tailored to the layer to be used. This is to note this examiner found no use of acrylic resin in the systems in Fan anticipating on the instant claims.

14. Claims 1-7, 9-12 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al (EP 1 152 298 A1). The examiner first notes that applicants have clearly defined what they mean by "acrylic resin" on page 18, lines 6-8, of their specification. The definition is as follows:

> **Acrylic resin is a polymer or copolymer of at least one monomer selected from the group consisting of acrylic acids, methacrylic acids, acrylates, and methacrylates.**

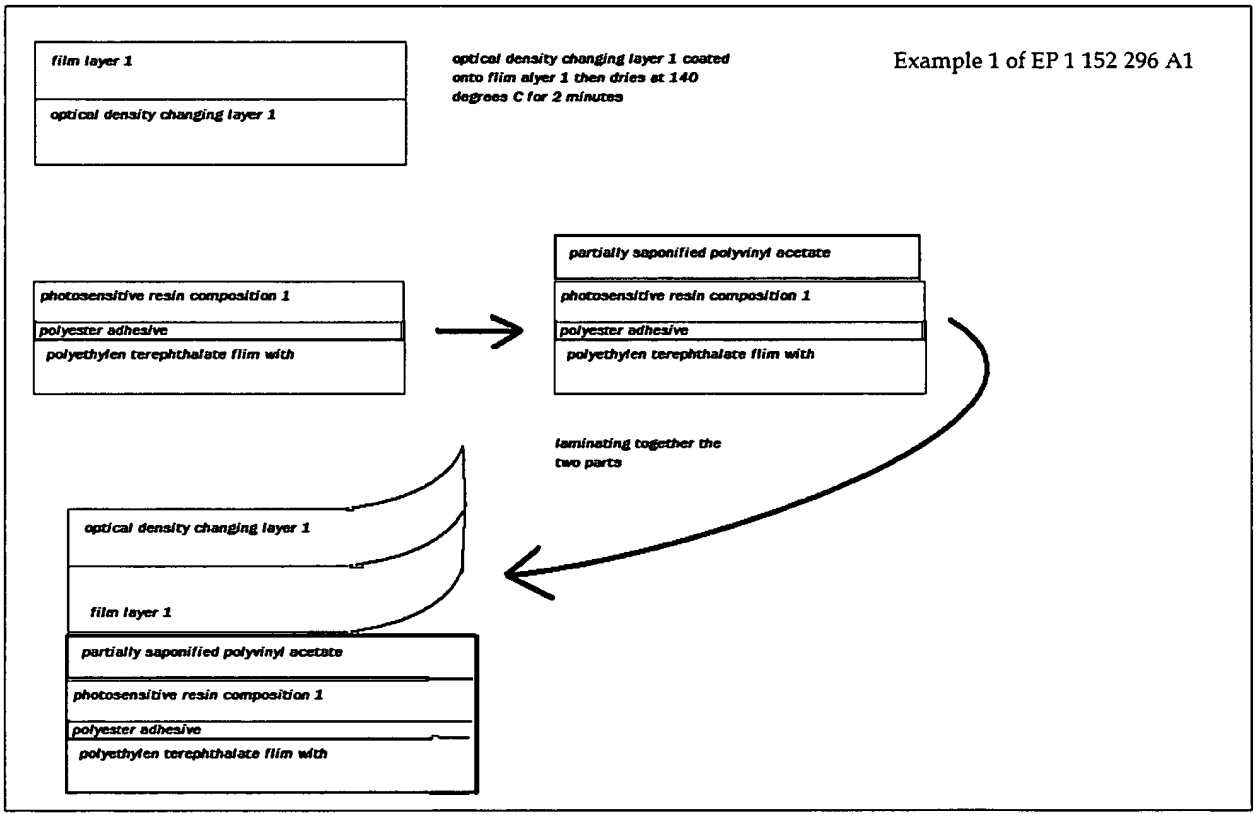
The acrylic ester "light Acrylate 3 Eg-A found in the Optical density changing layer composition 1 is not of itself such a resin but is a diacrylate of the following formula:



as recognized by ACS on STN, Registry File as CN 160-21-3. Thus, unless this diacrylate is polymerized through the acrylate groups then it is not an acrylic resin as defined by applicants.

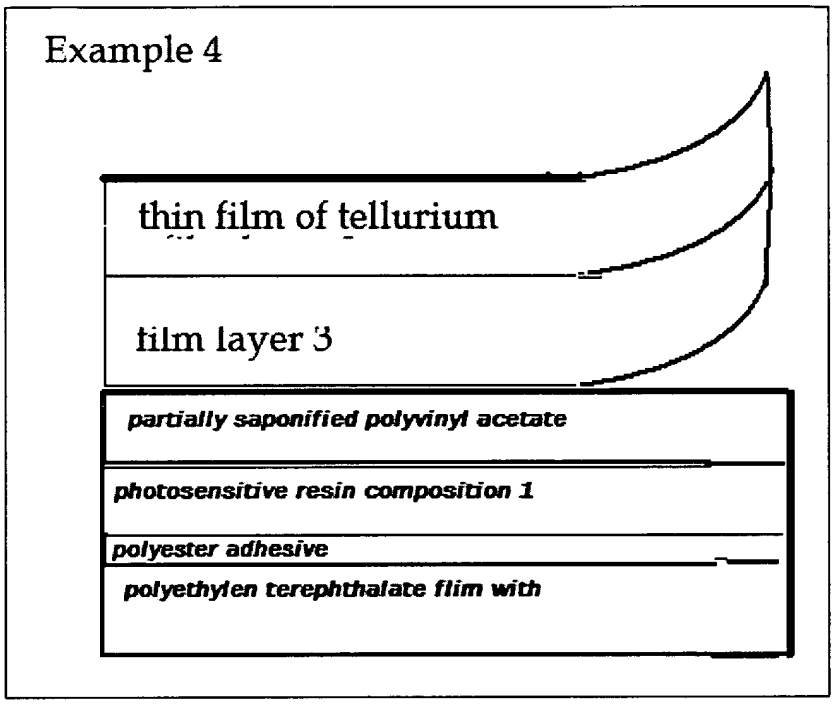
With respect to instant claims 1-3, 5-7, 10-12 and 16, printing plate material and method of makes and method of imaging set forth in Example 1 of Tanaka et al anticipates the instant invention wherein when heating the optical density changing layer when drying crosslinking

between epoxy resin and melamine occurs inherently along with polymerization of the diacrylate monomer which forms an acrylic resin reading on applicants instant definition of such. The examiner notes that claim 11 while describing what must be in the peel assist layer (D) if present does not require its presence. Thus, the presence of only a protective layer (E) as set forth in Example 1 of Tanaka et al reads on claim 11 as well. The element formed in Example 1 is detailed in the *examiner generated drawing* as follows:



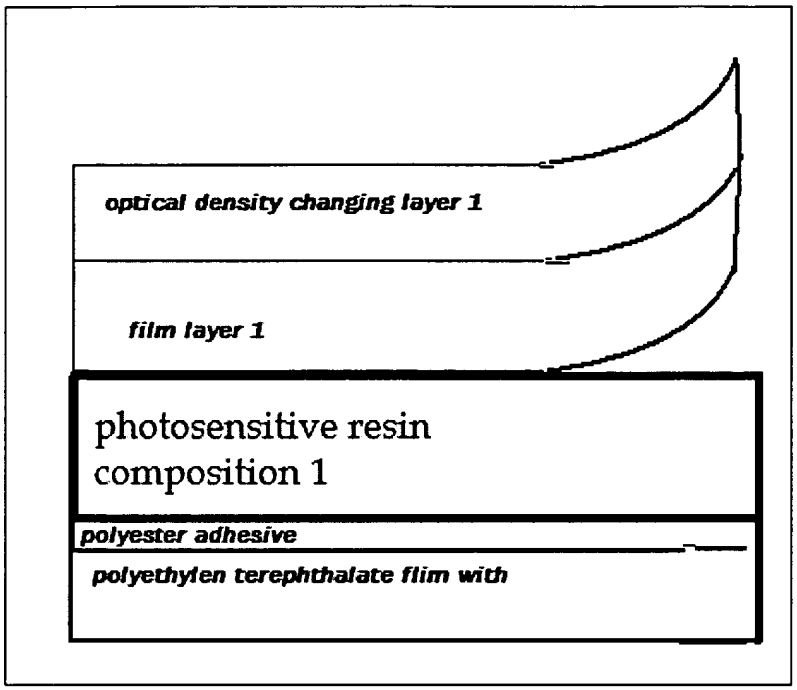
With respect to instant claims 1, 5-7, and 9–12 and 16, Example 2 of Tanaka et al anticipates the instant precursor, method of making and method of use. Example 2 of Tanaka et al varies from Example 1 only in that optical density changing layer 2 is used. With respect to instant claims 1, 4-7, 10-12 and 16, Example 4 of Tanaka et al anticipates the instant precursor, method of

making and method of using wherein the metal is tellurium. The *examiner generated drawing* below sets forth the nature of the element of Example 4 of Tanaka et al.



With respect to instant claims 1-3, 7, 10-12 and 16

, Example 9 of Tanaka et al wherein the layer between mask and film layer is removed anticipates the instant invention. An *examiner generated drawing* shows the precursor made below:



The examiner notes the following: "A generic claim cannot be allowed to an applicant if the prior art discloses a species falling within the claimed genus." The species in that case will anticipate the genus. *In re Slayter*, 276 F.2d 408, 411, 125 USPQ 345, 347 (CCPA 1960); *In re Gosteli,* 872 F.2d 1008, 10 USPQ2d 1614 (Fed. Cir. 1989). The examiner believes that the heating during formation of the mask layer when using the optical density changing layer 1 would cause some reaction of the epoxy resin and melamine resin and probably the light acrylate compound. Thus, the rejection of instant claims 2-3 is based upon this assumption with respect to what one of ordinary skill in the art would assume would happen. The examiner also notes that she found some confusion n the meaning of claims 2-3 with respect to when crosslinking occurred.

The examiner notes that Tanaka et al never disclose direct lamination of their optical density changing layer to the photosensitive layer as is found in instant claims 13-14 and 18. However, the lamination of the instant heat-sensitive mask element as found in instant claim 12

does not exclude other layers part of the mask element such as a protective film being that which laminates to the surface of the photosensitive resin layer because the element is more than just the instant water-insoluble heat sensitive mask layer (C). With respect to instant claims 17 and 18, Tanaka et al removes their mask layers by peeling them away, not washing them away with a liquid developer.

15. Claims 1, 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al (EP 1 152 298 A1) optionally further in view of Peterson (4,132,168). Tanaka et al do not make use of a photosensitive resin layer composition in their explicit examples examples which contains a polyvinyl alcohol, partially saponified polyvinyl alcohol or "their modified form". However, as set forth in the examples all else of claims 1 and 8 are disclosed. With respect to instant claims 1 and 8, Tanaka et al in [0016] teach the equivalence of water-soluble polyamide resins with partially saponified poly(vinyl acetate) for plates to be used with oil based inks when choosing carrier resins to maintain solid morphology of the photosensitive composition according to their invention. Thus, the use of such in a system with water soluble layer and water insoluble mask layer as found in all the examples would have been prima facie use of equivalent materials as taught by Tanaka et al. With respect to instant claim 18, Tanaka et al teaches in [0098] that a protective layer for the mask portion is not limited except to protect from flawing the optical density changing layer and that the layer can be peeled off at time of usage. The peeling after imaging and curing is found in the examples but peeling at the point of use of the precursor is inclusive of the well known practice of removal of such a layer before imaging starts as set forth in Peterson and would have been prima facie obvious to avoid any degradation in the infrared imaging with laser. With respect to instant claim 15, the Tanaka et al

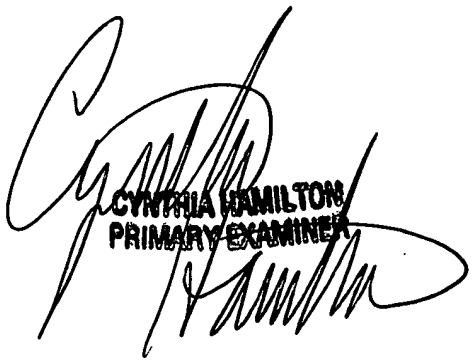
teaches starting in col. 14 under < Method for Producing the Photosensitive Resin Printing Plate Material> that a film stripping layer may be provided between the photosensitive resin layer and the film layer. The film layer in Tanaka et al at [0089] is part of the equivalent of the instant mask element set forth by applicants in their claim 12. The lamination is between the optical density-changing layer and a film layer wherein the film layer is to be adhered to the photosensitive layer surface via an adhesive layer to function as a peeling film. There is no requirement that this adhesive layer be only on the photosensitive resin layer. Since it is either mated to both simulateously during, or to either the photosensitive layer or the film then laminated the choices of three are so few as to make all prima facie obvious to workers of ordinary skill in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Hamilton whose telephone number is 571-272-1331. The examiner can normally be reached on Monday through Friday 9:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571) 272-0729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

June 20, 2006



Cynthia Hamilton
Primary Examiner
Art Unit 1752